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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,675	12/30/2003	Clifford J. Snyder	1985US2	9766

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EXAMINER

LEWIS, RALPH A

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/749,675	Applicant(s) SNYDER ET AL.	
	Examiner Ralph A. Lewis	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 22-28 is/are rejected.
- 7) ☒ Claim(s) 21 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>08/05/04, 04/11/05.</u> | 6) <input type="checkbox"/> Other: ____. |

Objection to the Claims

Claims 7-15 and 19-21 are objected to under 37 CFR 1.75(a) for failing to particularly point out and distinctly claim the subject matter which applicant regards as his/her invention.

In claim 7, line 7, there is no antecedent basis for "the ball end of the connecting rod" limitation.

In claim 15, line 1, there is no antecedent basis for "the flap portion."

Rejections based on Prior Art

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, 7-12, 15-17, 19, 20, 22, 25 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Nottingham et al (US 5,716,007).

Nottingham et al disclose a fluid dispenser capable of dispensing fluids to an oral cavity having a reservoir 16 and body 24. The lower end of the combination has a diameter larger than the upper end as is apparent in Figure 1. the body 24 further comprises a motor 94 which drives pump 24 through a drive mechanism having a connecting rod 96 and off-set eccentric disk 100. In regard to claim 7, note inlet port 78, outlet port 58, interior fluid channel/chamber 56, and piston 42 reciprocally received

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within the cylindrical chamber 56. In regard to claim 8, the outer edge of the piston 42 forms an annular flange, an interior pedestal is present between elements 48 and 46 and element 48 is received with an annular recess. In regard to claim 9, note inlet flapper/reed valve 40 and outlet valve 64. In regard to claim 22, whether the inlet valve is higher or lower in elevation than the fluid level is dependent solely on the orientation of the dispensing device and as such the limitation fails to provide for a structural distinction between the Nottingham et al device and that claimed by applicant.

Claims 1, 2, 5, 7, 18-20 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Ito et al (US 5,197,460)

In the Ito et al reference note Figure 6 disclosing a handheld oral irrigation device for dispensing fluids having a reservoir 34 and body 10. The lower portion of the device has a diameter greater than the upper portion. The device further includes a motor 20, pump 25 and drive mechanism 21, 22, 23 and 24. In regard to claim 4, note eccentric offset disk 23 extending from pump gears 22 and 21. In regard to claim 7, note Figure 24 with piston 26, inlet 47b and outlet 46b. In regard to claim 18, note lid 12.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (US 5,197,460) in view of Young (US 5,125,835).

Ito et al fails to disclose the claimed button for releasing the tip 37. The tip 37 of Ito is just frictionally attached to the dispensing tip body (See Figure 23). Young, however, for a similar oral irrigator teaches that it is desirable to provide the dispensing tip with a quick release button that positively couples the tip to the body so as to "prevent accidental tip ejection during use" (column 1, lines 26 and 27). To have provided the Ito et al dental irrigator tip 37 with a button release so as to positively connect the tip to the body and prevent unintended tip disconnections as is taught by Young would have been obvious to one of ordinary skill in the art. Additionally, it is noted in regard to claim 3, providing for an on switch and an off switch as opposed to a single on/off switch is simply a matter of basic electrical skill and would have been obvious to the ordinarily skilled artisan.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (US 5,197,460).

Ito et al fails to disclose any particular reservoir size. However, the selection of a reservoir size within the range claimed would have been obvious to the ordinarily skilled artisan in constructing the Ito et al device.

Claims 6-12 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nottingham et al (US 5,716,007) in view of Hickman et al (US 4,108,167).

In regard to claim 6, Nottingham et al discloses a cylindrical portion 46 which receives the offset disk 100 of the pump gear. It is unclear if this member is hollow, however, the ordinarily skilled artisan would have found making it hollow in order to reduce weight and material used in the construction of the device to have been obvious. The Nottingham cylindrical portion includes a arm that extends therefrom with a disk 48 (rather than the claimed ball) extending therefrom. Hickman et al, however, teaches that the formation of such a piston connecting member in a ball shape is of known conventional design (note the Figure on the front page), to have used a known prior art ball shape in place of the disk shape 48 of Nottingham et al would have been obvious to one of ordinary skill in the art as a substitution on known equivalent prior art parts. In regard to claim 7, to the extent that the ball end of line 7, which has no antecedent basis, is being positively claimed the present rejection applies.

Claims 13 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nottingham et al (US 5,716,007) in view of Rosenberg (US 3,572,375).

In regard to claims 13 and 27, Nottingham et al disclose a spring valve 64 for the fluid responsive outlet valve rather than the claimed reed/flapper valve. The use of reed type flapper valves that are fluid responsive for both the inlet and outlet of a pumping chamber is known in the art as evidenced by Rosenberg in Figure 4. Merely replacing

the outlet one way fluid responsive valve 64 of Nottingham with another known one way fluid responsive valve as is conventionally known in the art as evidenced by Rosenberg would have been obvious to one of ordinary skill in the art.

Claims 14 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nottingham et al (US 5,716,007) in view of Rosenberg (US 3,572,375), Rauschenberger (US 4,160,383) and Spencer (US 555,588).

In claims 14 and 28, it is unclear if Nottingham et al disclose the claimed rim structure for the one-way fluid responsive reed valve. The prior art, however, is replete with teaching showing the conventional construction of reed valves with an outer rim as is evidenced by Rosenberg (rim 74), Rauschenberger (Figure 2) and Spencer (rim 12) that aid to secure the flapper valve in position. To have provided the Nottingham et al flapper valve with such conventional rim construction in order to aid in the securement of the flapper valve to the device would have been obvious to one of ordinary skill in the art in view of the cited teachings.

Allowable Subject Matter

Claim 21 is objected to and would be allowable if rewritten in independent form to include all of the limitations of the claims from which it depends and to overcome the indefiniteness objections noted above.

Prior Art

Applicant's information disclosure statements of August 05, 2004 and April 11, 2005 have been considered and initialed copies enclosed herewith. Applicant's assistance in citing only art that is reasonably relevant to the claimed apparatus is requested.

Bippus (US 4,154,375) and Silvenis et al (US 5,150,841) are made of record.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication should be directed to **Ralph Lewis** at telephone number **(571) 272-4712**. Fax (703) 872-9306. The examiner works a compressed work schedule and is unavailable every other Friday. The examiner's supervisor, Kevin Shaver, can be reached at (571) 272-4720.

R. Lewis
June 3, 2005



Ralph A. Lewis
Primary Examiner
Au3732